

# PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

# PCT

To:

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**Patent Mail Received**

**AUG 11 2008**

INVITATION TO PAY ADDITIONAL FEES  
AND, WHERE APPLICABLE, PROTEST FEE  
(PCT Article 17(3)(a) and Rule 40.1 and 40.2(e))

**REGISTERED MAIL**

Date of mailing  
(day/month/year) 07/08/2008

Applicant's or agent's file reference  
189233/PCT

**PAYMENT DUE**  
within **ONE MONTH** from  
the above date of mailing

International application No.  
PCT/US2008/062354

International filing date  
(day/month/year) 02/05/2008

Applicant

THE GENERAL HOSPITAL CORPORATION

**1. This International Searching Authority**

- (i) considers that there are 2 (number of) inventions claimed in the international application covered by the claims indicated on an extra sheet:
- (ii) therefore considers that **the international application does not comply with the requirements of unity of invention** (Rules 13.1, 13.2 and 13.3) for the reasons indicated on an extra sheet:
- (iii) ☒ has carried out a partial international search (see Annex) ☐ will establish the international search report on those parts of the international application which relate to the invention first mentioned in claims Nos.:  
**see extra sheet**
- (iv) will establish the international search report on the other parts of the international application only if, and to the extent to which, additional fees are paid.

**2. Consequently, the applicant is hereby invited to pay, within the time limit indicated above, the amount indicated below:**

EUR 1.700,00 x 1 = EUR 1.700  
Fee per additional invention      number of additional inventions      currency/total amount of additional fees

**3. The applicant is informed that, according to Rule 40.2(c), the payment of any additional fee may be made under protest, i.e., a reasoned statement to the effect that the international application complies with the requirement of unity of invention or that the amount of the required additional fee is excessive, where applicable, subject to the payment of a protest fee.**

Where the applicant pays additional fees under protest, the applicant is hereby invited, within the time limit indicated above, to pay a protest fee (Rule 40.2(e)) in the amount of EUR 750,00 (currency/amount)

Where the applicant has not, within the time limit indicated above, paid the required protest fee, the protest will be considered not to have been made and the International Searching Authority will so declare.

4. ☐ Claim(s) Nos. \_\_\_\_\_ have been found to be **DOCKETED** under Article 17(2)(b) because of defects under Article 17(2)(a) and therefore have not been included with any invention.

Name and mailing address of the International Searching Authority



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Authorized officer

Cora Dreyer

*Cora Dreyer*

1. The present communication is an Annex to the invitation to pay additional fees (Form PCT/ISA/206). It shows the results of the international search established on the parts of the international application which relate to the invention first mentioned in claims Nos.:  
see 'Invitation to pay additional fees'
2. This communication is not the international search report which will be established according to Article 18 and Rule 43.
3. If the applicant does not pay any additional search fees, the information appearing in this communication will be considered as the result of the international search and will be included as such in the international search report.
4. If the applicant pays additional fees, the international search report will contain both the information appearing in this communication and the results of the international search on other parts of the international application for which such fees will have been paid.

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KOSKI K ET AL: "Brillouin imaging" APPLIED PHYSICS LETTERS, AIP, AMERICAN INSTITUTE OF PHYSICS, MELVILLE, NY, vol. 87, no. 6, 1 August 2005 (2005-08-01), pages 61903-61903, XP012077377 ISSN: 0003-6951	1-3,5,6, 9-21,29
Y	the whole document	1-21,23, 29
Y	----- US 2005/046837 A1 (IZUMI HIROTOMO [JP] ET AL) 3 March 2005 (2005-03-03) page 3, paragraph 60 - page 6, paragraph 107 page 8, paragraph 129 - page 9, paragraph 139; figures 1,5,26	1-23,29
X	----- LIPTAK DAVID ET AL: "On the development of a confocal Rayleigh-Brillouin microscope" REVIEW OF SCIENTIFIC INSTRUMENTS, AIP, MELVILLE, NY, US, vol. 78, no. 1, 31 January 2007 (2007-01-31), pages 16106-16106, XP012103628 ISSN: 0034-6748	1,2,5,9, 10, 12-22,29
Y	the whole document	1-23,29

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

° Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-23 and 29

Claims 1-23 and 29 are directed to an apparatus comprising a first arrangement for receiving Brillouin scattered radiation from an illuminated sample, a second arrangement for separating the sample radiation into a number  $N$  of frequency components, and a third arrangement for receiving radiation corresponding to more than  $1/N$  of the energy of the sample radiation. Information about the sample is generated by the third arrangement.

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2. claims: 24-28 and 30

Claims 24-28 and 30 are also directed to an apparatus comprising a first arrangement for receiving Brillouin scattered radiation from an illuminated sample. In addition it is defined that the first arrangement for receiving the Brillouin scatter also receives radiation with a second frequency and that both frequencies are separated by the first arrangement. A second arrangement is configured to simultaneously detect both frequencies. The sample information is generated by the second arrangement.

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The common technical feature of the two inventions is an apparatus comprising a first arrangement for receiving Brillouin scattered radiation from an illuminated sample. Information about the sample is generated. The special technical features of the two groups of claims are directed to the solution of two different problems:

Group I (claims 1-23 and 29) intends to solve the problem of low temporal resolution in Brillouin spectroscopy by using a dispersive element which should have a sufficient sensitivity.

Group II (claims 24-28 and 30) refers to the simultaneous detection and examination of Brillouin scatter and fluorescence and/or Raman and/or reflection effects. This provides simultaneous different and/or supplementary information about the sample.

The special technical features and the problems which are intended to be solved by the two groups of claims define two different inventions not linked by a single general inventive concept. The application, hence does not meet the requirements of unity of invention as defined in Rules 13.1 and 13.2 PCT.

### Information on patent family members

PCT/US2008/062354

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2005046837 A1	03-03-2005	EP 1517165 A2 JP 2005077964 A	23-03-2005 24-03-2005

# Important Information

## General:

- The **claims cannot be changed** at this point in the procedure, the transmitted report is **not** the international search report (see Art. 19 PCT).
- Any payment has to be made **directly** to this ISA, payments to other entities will not be accepted.
- In case of a **total of more than 2 inventions** found: when paying please **specify exactly** which claims should be searched (unless you pay for all inventions found)
- An **extension of the set time limit** cannot be granted.

## Payment by cheque (not accepted as of 01/04/2008):

- The **date to be considered as the date on which the payment is made** is the **date of receipt of the cheque at the EPO**, provided that the cheque is **met**.
- Copies of cheques sent by fax or by mail are not considered to be a valid payment.
- The fees shall be paid in euro, no equivalents in other currencies.
- No payments by cheque shall be accepted as of 01/04/2008 (date of receipt at the EPO).

## Payment or transfer to a bank account:

- The **date to be considered as the date on which the payment is made** is the date on which the amount of the payment or the transfer is **actually entered** in a bank account or Giro account held by the EPO.
- The fees shall be paid in euros, no equivalents in other currencies, all charges to be carried by the applicant
- For a list of accounts held by the EPO please see [http://www.european-patent-office.org/epo/new/bank\\_euro.pdf](http://www.european-patent-office.org/epo/new/bank_euro.pdf)

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- The **date to be considered as the date on which the payment is made** is the date that the **authorisation** to deduct fees from the deposit account is **received at the EPO**.

***Note:** If you don't have a deposit account with the EPO yourself you might want to consider using the account of an associate as a safe and quick way of paying.*

**Payments by credit card are not possible.**

## Payments under protest (one-step procedure under Rule 40 PCT as of 13/12/2007):

- For general information on the protest procedure at ISA/EP, please refer to the Special Edition No. 3 of the OJ of the EPO 2007, pages 140-145, [http://www.european-patent-office.org/epo/pubs/oj007/08\\_07/spécial\\_edition\\_3\\_epc\\_2000\\_decisions.pdf](http://www.european-patent-office.org/epo/pubs/oj007/08_07/spécial_edition_3_epc_2000_decisions.pdf)
- Any protest will **only be accepted if**, within the time limit set in the invitation, the additional fees for each invention to be searched **and** the protest fee are paid.
- The protest has to be **accompanied by a technical reasoning**.

## **European Patent Organisation**

### **Account details**

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